# Career Pathways—Leveraging CTE to Enhance Learning for All Students

Part 3: Creating Coherence With Career Pathways

Beth Ratway, Content Expert July 2016

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### **CCRS** Center

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at American Institutes for Research



Website:

www.ccrscenter.org

Who?

State Department of Education Agencies

What?

Build state education agency (SEA) capacity to implement college and career ready policies. E-mail:

CCRSCenter@air.org

How?

Provide technical assistance, including targeted and intensive support.

Why?

Career pathways can align academic learning and career readiness skills.

## Career Pathways Webinar Series

Webinar Title	Webinar Date
Engaging Key Stakeholders in the Career Pathways Design Process	Thursday, July 14, 2016, 3:00–4:00 p.m. ET
Understanding the State Context to Inform Career Pathways Design	Tuesday, July 19, 2016, 3:00–4:00 p.m. ET
Creating Coherence With Career Pathways	Monday, July 25, 2016, 4:00–5:00 p.m. ET

## Today's Objectives

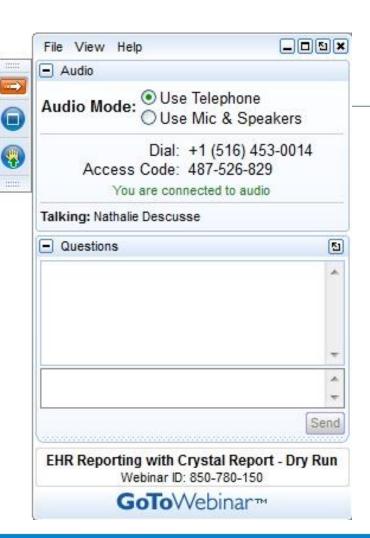
- Discuss ways to build coherence between career pathways and other initiatives
- Learn how Tennessee has created coherence between career pathways and other initiatives
- Share available resources to begin to create coherence

## **Engaging With Us**

Postevent feedback survey

Recorded webinar

http://www.ccrscenter.org/prod ucts-resources/ccrs-centerwebinars-events



## Today's Presenters



Ellen Cushing
Deputy Director, CCRS Center



Heather Justice
Executive Director, Office of Career & Technical
Education (CTE), Tennessee Department of
Education



Catherine Jacques
Technical Assistance Lead, CCRS Center

## **Polling Question 1**

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## Creating Coherence Within the Career Pathways System

Ellen Cushing, CCRS Center

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## Importance of Creating Policy and Program Coherence

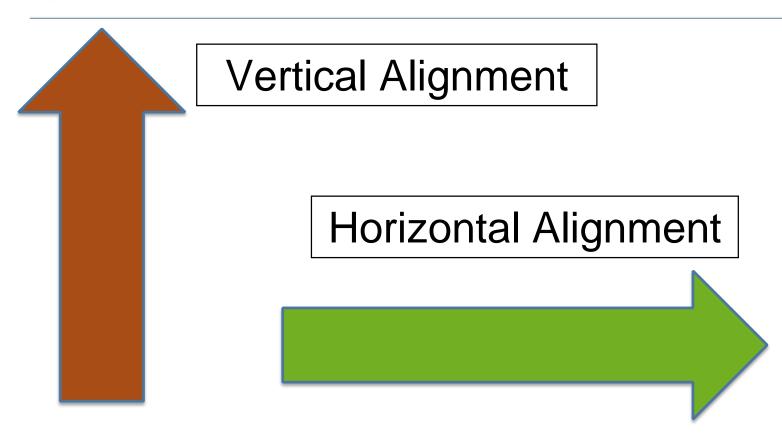
- Every Student Succeeds Act
  - Well-rounded education, standards alignment, and funding for career pathways, guidance, preparation
- Carl Perkins Act
  - Pipeline beyond high school graduation to connect with industry needs; promotes work-based learning and multiple measures of demonstrating competency.
- Workforce Innovation and Opportunity Act
  - Programs that lead to a postsecondary credential



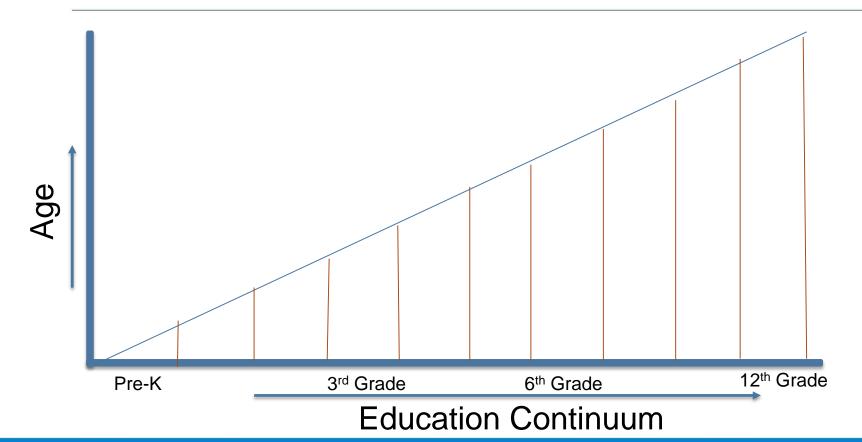
## Outcomes of Policy and Program Coherence

- Promote a coherent vision of college and career readiness
- Avoids "another thing to do" mentality
- Increases stakeholder support
- Increases likelihood of sustainability
  - Mutually reinforcing policies
  - Opportunities to leverage funds
  - Opportunities to leverage expertise
  - Stakeholders are invested

## Establishing Policy and Program Coherence



### Vertical Coherence

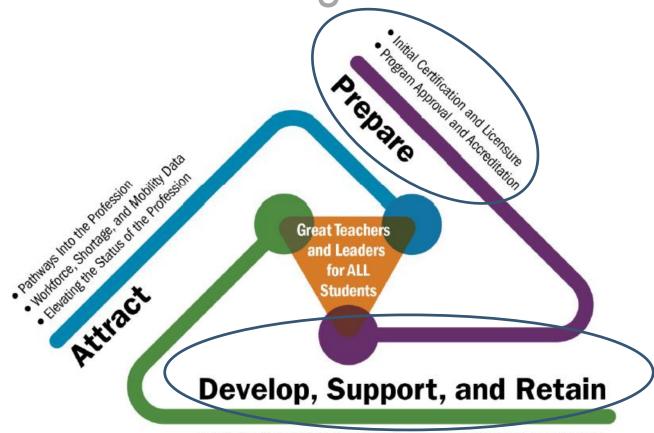


### Horizontal Coherence





**Educator Talent Management** 



Source: GTL Center, 2014

- · Recruitment, Selection, and Hiring
- Career Advancement and Tiered Licensure
- Evaluation and Professional Learning
- Recertification and Continuing Licensure
- Induction and Mentoring
- Educator Environment
- Assignment and Transfer
- Compensation

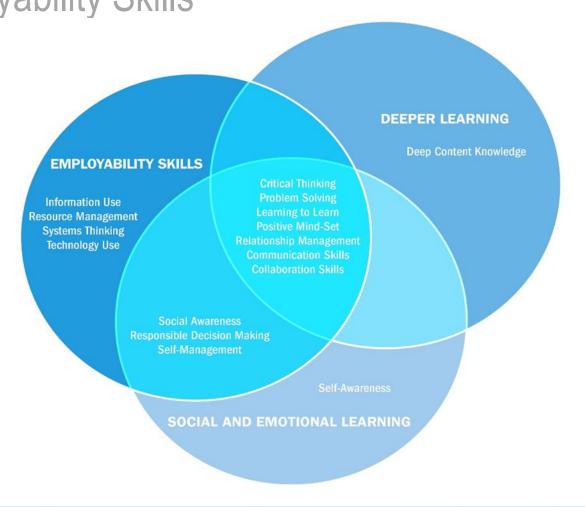
### **Broader Priorities**

- Federal, Governor, Superintendent, District
- Might include:
  - Deeper learning
  - Competency-based education
  - Social and emotional learning
  - Employability skills (soft skills, 21st Century Skills)

## Contextualizing Employability Skills



Crosswalk of Deeper Learning, Social-Emotional Learning, and Employability Skills



### Considerations for Coherence

- Data sharing
- Stakeholder engagement
- Aligning to a vision
- Allocating time



## STATE STRATEGIES IN TENNESSEE FOR SCALING CAREER PATHWAYS

July 25, 2016



## CALL TO ACTION: TENNESSEE'S OPPORTUNITIES

#### TOP TEN INDUSTRIES IN TENNESSEE

- □ Advanced Manufacturing
- □ Aerospace and Defense
- □ Automotive
- **□** Business Services
- □ Chemicals, Plastics, and Rubber
- □ Energy Technology

- □ Film, Music, and Entertainment
- □ Food and Agribusiness
- Health Care and Medical Devices
- □ Transportation, Distribution, and Logistics



#### **ECONOMIC BENEFIT OF EDUCATION**

**\$9.3 Billion in Additional Income Annually to Tennessee's Workforce:** An estimated 528,630 additional certificate or degree holders will work in Tennessee upon achievement of 55% postsecondary attainment by 2025. These workers are projected to earn \$9.3 billion more in additional income annually than that which would have been generated without a postsecondary credential.

Incremental Income Boost With Postsecondary Attainment: On average, a high school graduate in Tennessee could earn \$5,941 more per year with a certificate or an associate's degree, \$18,860 more per year with a bachelor's degree, and \$30,949 more per year with a graduate or professional degree in 2015.

Median Earnings by Level of Education in Tennessee	
Level of Educational Attainment	Median Earnings (in 2015 dollars)
Less than high school graduate	\$19,035
High school graduate (includes equivalency)	\$26,365
Some college or associate's degree	\$32,306
Bachelor's degree	\$45,225
Graduate or professional degree	\$57,314



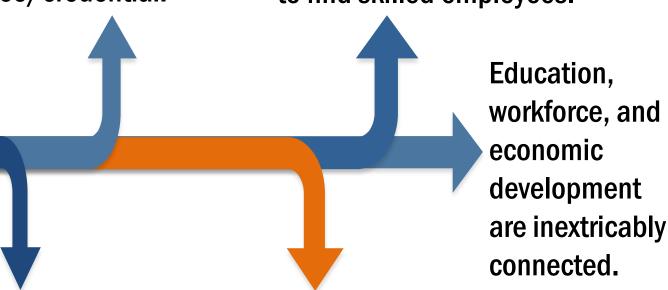


## EDUCATION to CAREER STUDENT PATHWAYS

#### EDUCATION to CAREER PATHWAYS

Too few young people complete a postsecondary degree/credential.

Growth industry fields hold promise; employers struggle to find skilled employees.



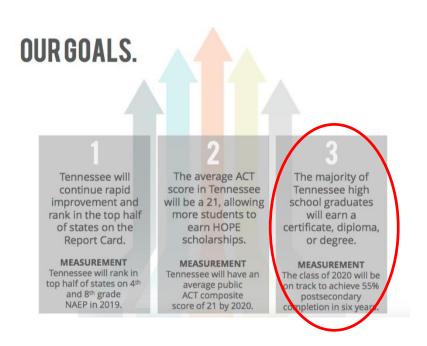
High school diplomas are increasingly getting squeezed out as the 'entry level' requirement.

Careers increasingly require postsecondary education and work readiness skills and experience.



#### DEPARTMENT OF EDUCATION GOALS

- "Districts and schools in Tennessee will exemplify excellence and equity such that all students are equipped with the knowledge and skills to successfully embark upon their chosen path in life."
- Vision Statement from Tennessee Succeeds







### PATHWAYS TENNESSEE

#### STUDENT PATHWAYS FRAMEWORK

1. Active industry involvement in student learning, starting in early grades

2. Strong integration of student supports, interventions, and counseling

4. Seamless transition from secondary to postsecondary

6. Qualified workforce has regional/state relevance

Middle School

Career Awareness **High School** 

Selected Program of Study with relevant Capstone Experience

Community College (AA/AS)

**Technology College** 

(Industry Certification)

Aligned
Career
Opportunities

University or College (BA/BS)

5. Have multiple entry and exit points for grades 13–16

3. "Bank" postsecondary course credits and/or industry certifications in high school



#### VEHICLE FOR CHANGE: PATHWAYS TN

#### **Goal**

To provide Tennessee students in grades 7–14/16 access to rigorous academic/career pathways that are interlinked with local, regional, and state economic/labor market needs and trends to develop and promote a workforce that is educated and skilled in their chosen fields.





#### STATEWIDE EDUCATION to CAREER INITIATIVES

<u>Drive to 55</u>: Governor Haslam's mission to get a minimum 55% of Tennesseans equipped with a college degree or certificate by 2025.

<u>Tennessee Promise</u>: A scholarship and mentoring program beginning in fall 2016 that will provide students a last-dollar scholarship that may be used at any state institution offering an associate's degree program or technical credential.

<u>Tennessee Reconnect</u>: A scholarship program for returning adults to attend and earn a certificate at any of the 27 Tennessee Colleges of Applied Technology (TCATs); Tennessee Reconnect scholarships completely cover tuition and fees.



#### STATEWIDE EDUCATION to CAREER INITIATIVES

Tennessee LEAP (Labor Education Alignment Program): Grant initiative designed to target skills gaps across Tennessee in a proactive, data-driven, and coordinated manner by encouraging collaboration across education (secondary/postsecondary) and industry.

<u>Workforce 360</u>: Economic and community development focus designed to create a statewide, systematic approach to identifying workforce gaps and streamlining solution processes across Tennessee by utilizing state department communication, interaction, and resources.



#### STRUCTURE and APPROACH

#### **State Planning Team**

- Department of Economic and Community Development
- Department of Education
- Department of Labor and Workforce Development
- Governor's Office
- Tennessee Board of Regents System

#### **Regional Leadership**

- Intermediary Organization
- Leadership Team/Council
- Regional State Officers
- Work Teams
- Stakeholders determined by identified needs

#### Regional/Super Regional Focuses

- Data-driven decision making (Asset Mapping)
- Commitment to shared priorities
- Grade 7–14/16 pathways
- Regional plans with accountability measures
- Approach from "both end points" of pathway

- State Collaborative on Reforming Education (SCORE)
- Tennessee Business Roundtable
- Tennessee Higher Education Commission
- Tennessee State Board of Education
- Tennessee Independent Colleges and Universities Association

#### **Timeline**

- Tennessee joined Pathways to Prosperity (PTP) Network
   June 2012
- Director hired
   November 2012
- State Planning Team November 2012
- Pathways Tennessee Strategic Plan and Operation
   June 2013



#### STATE PLAN: CORE PRIORITIES

#### **CHAMPION**

Convene and Utilize State Partnerships to Advocate the Importance of Regional Academic/Career Pathways Across Tennessee

#### **SUPPORT**

Support Regionally Led and Sustainable Pathways Initiatives
That Align With Industry Needs

#### **ALIGN**

Align and Expand Resources Across State Agencies to Assist Regional Pathways Initiatives

#### **EVALUATE**

Ensure Continuous Improvement of Pathways Tennessee Opportunities through Critical Evaluation of Processes and Outcomes



#### REPORTING and ACCOUNTABILITY

#### **Regions**

- Initially, required regional teams to undergo an asset mapping and, from that, create a strategic plan on pathway focus areas relevant to their workforce needs.
- Regions currently operate a suite of supports and tools to better position the
  regions and their intermediaries in (a) developing strong cross-stakeholder
  structures, (b) sharing promising practice, and (c) gathering data on their areas
  of focus.



#### REPORTING and ACCOUNTABILITY

#### **Supports/Tools**

- Strategic Plans: Yearly SMART goals focused on regional priorities, outlining strategic partnerships, focusing on pathways within certain sectors.
- Pathways Documentation Tool: Tool shows the pathway from high school to postsecondary to work, noting early college credit and the ability to participate in work-based learning for credit and aligned certifications. It also promotes/allows for the sharing of regional strengths and assistance in identifying and addressing gaps and supports in providing pathways.
- **Site Observation Tool**: Self-assessment tool, which is adapted from an existing Jobs for the Future (JFF) resource. Regions rate themselves and provide evidence on progress in addressing specific PTP levers.
- Statewide Metrics Tool: Collection of course codes, CIP (postsecondary program identifier) codes, and SOCs (standard occupation codes), in addition to other specific identifiers such as credential attainment, along with work-based learning measures to determine whether or not regions are providing experiences that "move the needle" in their identified sectors.



#### FUNDING and SUSTAINABILITY

Pathways Tennessee is not legislated or mandated (no directed state funding).

This has allowed for creative funding from Day 1.

#### **State**

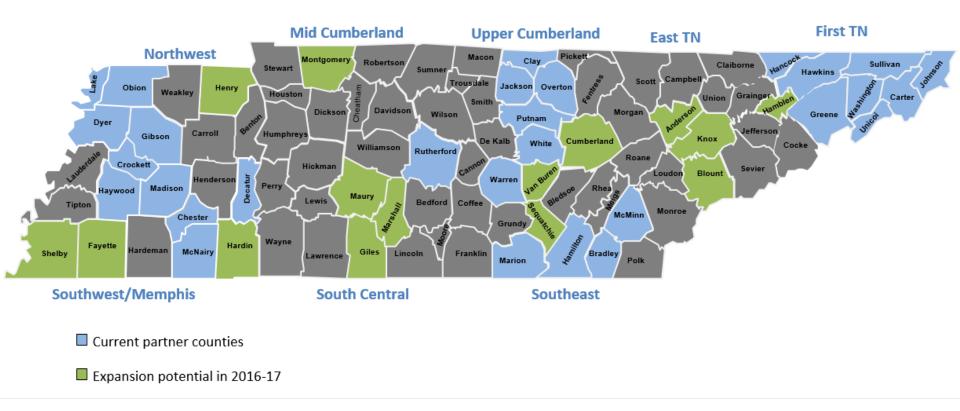
- State partners utilize existing staff members; involvement is embedded or integrated into existing agency strategic priorities and plans.
- Pathways Tennessee staff salaries/benefits are covered trough TDOE state funds.
- Existing state and federal funds of state partners are targeted and leveraged in Pathways regions.
- Pathways Tennessee recipient of directed grant funds and federal grant SOW.

#### **Regions**

 State, federal, private funding are targeted. Sources must be used to support and leverage regional key priorities and the growth of these priorities.



#### PATHWAYS TENNESSEE







#### Heather Justice

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## **Polling Question 2**

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# Resources: Designing Career Pathways and Planning for Implementation

Catherine Jacques, CCRS Center

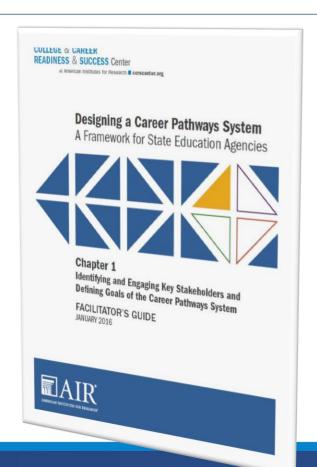
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## Career Pathways Module: A Framework for SEAs

- Includes
  - Facilitator guide
  - Handouts and supplementary resources
  - Slide presentation
- Leads SEA through designing and implementing a career pathways system.

<u>www.ccrscenter.org/technical-assistance-networks/career-pathways-modules</u>



## Designing a Career Pathways System: A Framework for State Education Agencies



#### Labor Market Gap Analysis

After identifying the key career readiness policies and programs, the facilitator will need to identify the growing industries within the state. Aligning career pathways with future labor market needs will increase the chances that students will be able to secure gainful employment. Youth who consider and pursue a career in growing business and industry sectors also create a pipeline of trained employees for these employers.

The Career One Stop website uses federal labor data to identify each state's growing careers. This site is a good place to start when researching be preliminary as it will likely be refined once the facilitator convenes the stakeholders and discusses



To prepare for this discussion, the facilitator identifies the

growing industries and occupations and completes the Handout 2B: Labor Market Gap Analysis Template. When completing the template, the facilitator should have access to key information about each occupation:

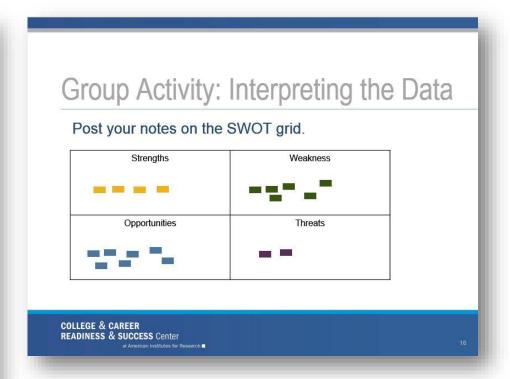
- ► Annual job openings
- Number of qualified annual applicants
- ▶ Projected annual gap in qualified applicants
- Projected 10-year gap in qualified applicants

This information will be used with stakeholders to identify and prioritize growing industries. Facilitators can find examples of this information through federal resources such as O\*NET OnLine or the Bureau of Labor Statistics, state resources such as the state workforce commission or Department of Labor, and additional resources such as One Stop Career Center or chambers of commerce.

Note: The facilitator will need to use the template table for as many industries as will be the focus of this analysis. Because this work is time intensive, the facilitator may wish to include additional staff within and outside of the facilitator's agency, such as regional comprehensive center staff or staff from other agencies, to locate the Information

If the career pathways system will include micro-economies, that is, economies with greater regional, county, or municipal significance than statewide significance, this information should be included in the mapping process.

Data available through public sources are typically lagging. There are realtime labor market information sources that are usually available for a fee. Costs range from \$5,000 to \$10,000 for a single-user, one-year license. (Source: http://www.jff.org/ sites/default/files/publications/ VendorProductReview 041712.pdf)



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## Career Pathways Modules



1. Engaging Key Stakeholders and Defining Goals

Identify key stakeholders, define roles and responsibilities of stakeholders in designing a state career pathway system, and determine the goals of the career pathways system.



2. Mapping Policies, Programs, and Industries

Map and assess existing career readiness policies and programs, identify growing occupations in the state or region, and prioritize industries and occupations that will be the focus of the career pathways system.



3. Designing a Framework

Prioritize labor market data, understand the knowledge, skills, and competencies students should acquire for specific industries and interpret career pathways system data to develop a career pathways system framework.



4. Implementation and Continuous Improvement

Create a process for refining the career pathways system over time, by identifying outcome measures, collecting data on the measures, and analyzing the data to continuously improve and sustain the career pathways system.

## Chapter 3: Designing a Career Pathways System Framework

- Complete and review the labor market gap analysis
- Identify experts from target industries
- Prioritize industry focus and develop an industry-specific pathways system



## Chapter 3: Designing a Career Pathways Framework

 Handout 3B: Knowledge, Skills, Dispositions, and Competencies Note-Taking Template

Expert Presentation Industry: \_\_\_ Certified Nursing Assistant Pathway \_

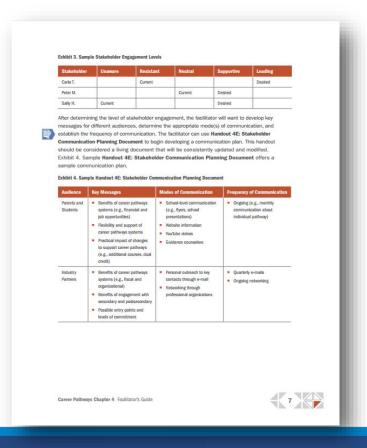
Note-Taking Topics	Sample Notes: Healthcare Industry	<b>Expert Presentation Notes</b>
Key skills, knowledge, dispositions, and competencies that graduates need for their industry	Healthcare: Students must demonstrate knowledge of the techniques needed to diagnose and treat human injuries, diseases, and deformities. This knowledge includes symptoms, treatment alternatives, drug properties and interactions, and preventive health care measures.	
Future wage earnings and potential for growth within the industry	Median wage is \$10.31/hour or \$22,300 annually	
Course sequencing ideas and topics	9th grade—Principles of biomedical sciences 10th grade—Human systems 11th & 12th grades—Medical intervention 12th grade—Medical innovation 12th grade—Certified nursing assistant	
Additional guidance, information, or recommendations to discuss	Course requires additional supplies students must buy, such as gloves and scrubs—how can we support those costs?	

Handout 3D: Career Pathways System Framework

Industry of Focus:								
Career Options:								
Course Sequencing								
9th Grade	10th Grade	11th Grade	12th Grade					
Work-Based Opportur	nity and Postsecond	lary Options for the Indu	stry					
Work-Based Opportunities		Postsecondary Options						
Example: Job Shadowing, Internship, Apprenticeship, Project-Based Learning		Example: Two-Year Program, Four-Year College, Apprenticeships, Certifications, Other						

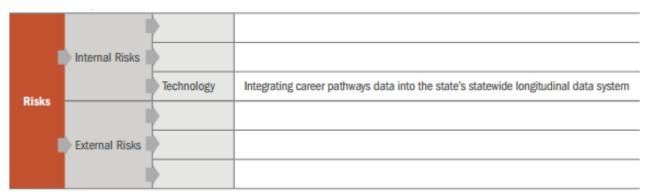
## Chapter 4: Planning for Implementation and Continuous Improvement

- Develop a comprehensive work plan and monitor implementation
- Identify short- and long-term metrics
- Engage stakeholders in reflection on the implementation process



## Chapter 4: Planning for Implementation and Continuous Improvement

#### Handout 4C: Risk Breakdown Document



#### Handout 4D: Stakeholder Roles in Evaluation

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
Carla T.		Current			Desired
Peter M.			Current	Desired	
Sally H.	Current			Desired	

## Chapter 4: Planning for Implementation and Continuous Improvement

Defining Quality Metrics:

| Secondary and Postsecondary | Workforce Measures to Consider: | Long-Term Success Measures to Consider: | Long-Term Success Measures to Consider: | Course completion | Program participation | Improved unemployment and out-of-workforce trends for individuals | Industry certificates earned | assistance provided | under 25

Employment and earnings in the target occupations or industry

When identifying outcome measures, consider measures for secondary, postsecondary, workforce, and

internship participation

Narrowed labor market gaps

- GTL Center. (2014). Talent Development Framework for 21<sup>st</sup> Century Educators: Moving Toward State Policy Alignment and Coherence. Retrieved from <a href="http://www.gtlcenter.org/sites/default/files/14-2591\_GTL\_Talent\_Dev\_Framework-ed\_110714.pdf">http://www.gtlcenter.org/sites/default/files/14-2591\_GTL\_Talent\_Dev\_Framework-ed\_110714.pdf</a>
  - Guidance on how to proactively developing coherent policies around educator talent management
  - Includes a step-by-step process to assess existing policy needs, prioritize policy elements, analyze implementation and consistency, and identify next steps
  - Can be used as a model on how to promote broad policy coherence

- LINCS Career Pathways Exchange: <u>https://lincs.ed.gov/professional-development/resource-collections/by-topic/Career%20Pathways</u>
- U.S. Department of Labor. (2015 and 2016). Career Pathways
   Toolkit: A Guide for System Development. Retrieved from
   <a href="https://wdr.doleta.gov/directives/attach/TEN/TEN\_17-15">https://wdr.doleta.gov/directives/attach/TEN/TEN\_17-15</a>
   <u>15 Attachment Acc.pdf</u> and <a href="http://cte.ed.gov/initiatives/career-pathways-systems">http://cte.ed.gov/initiatives/career-pathways-systems</a>
  - Provides guidance and suggestions on the elements that should be included in a career pathways system

- Washington State OSPI. (2016). Career Ready Lesson Plans for Grades 6–12. Retrieved from <a href="http://www.k12.wa.us/secondaryeducation/careercollegereadine-ss/CareerReady.aspx?\_sm\_au\_=iVVsTtQQgDjZPkgR">http://www.k12.wa.us/secondaryeducation/careercollegereadine-ss/CareerReady.aspx?\_sm\_au\_=iVVsTtQQgDjZPkgR</a>
  - Example of state support resources for career exploration and career pathways integration across grade levels
- Hughs, K.L., & Karp, M.M. (2006). Strengthening Transitions by Encouraging Career Pathways: A Look at State Policies and Practices. Retrieved from <a href="http://ccrc.tc.columbia.edu/media/k2/attachments/strengthening-transitions-career-pathways.pdf">http://ccrc.tc.columbia.edu/media/k2/attachments/strengthening-transitions-career-pathways.pdf</a>
  - How to use data, guidance, and high school graduation requirements to integrate career pathways

- LINCS. (n.d.). Preparing English Learners for Work and Career Pathways. Retrieved from <a href="http://lincs.ed.gov/sites/default/files/LINCS\_CLR-1\_508\_0.pdf">http://lincs.ed.gov/sites/default/files/LINCS\_CLR-1\_508\_0.pdf</a>
  - Guidance on how to integrate career pathways initiatives with other supports, standards, and programs for English learners.
- Barker, L.T. (2014). Career Pathways for Youth with Disabilities: Transition from School to Work and Lifelong Learning. IMPAQ International. Retrieved from <a href="https://www.impaqint.com/sites/default/files/files/Career%20Pathways%20for%20Youth%20with%20Disabilities%20-%20Transition%20from%20School%20to%20Work%20and%20Lifelong%20Learning.pdf">https://www.impaqint.com/sites/default/files/files/Career%20Pathways%20for%20Youth%20with%20Disabilities%20-%20Transition%20from%20School%20to%20Work%20and%20Lifelong%20Learning.pdf</a>
  - Guidance on how to integrate and align career pathways with other supports and initiatives focused on supporting students with disabilities.

- Roberts B., & Price, D. (2015). Building Career Pathways for Adult Learners: An Evaluation of Progress in Illinois, Minnesota, and Wisconsin After Eight Years of Shifting Gears. The Joyce Foundation. Retrieved from <a href="http://www.joycefdn.org/assets/1/7/joyceFnd\_ShiftingGears3.0.pdf">http://www.joycefdn.org/assets/1/7/joyceFnd\_ShiftingGears3.0.pdf</a>
  - Summarizes the success of career pathways in three states, including the policies that led to successful outcomes
- US Departments of Education, Health and Human Services, and Justice. (2015). Approaches for the Delivery of Education, Training, Employment, and Human Services. Retrieved from <a href="https://lincs.ed.gov/publications/pdf/CP\_RFI.pdf">https://lincs.ed.gov/publications/pdf/CP\_RFI.pdf</a>
  - Summarizes successful strategies for career pathways implementation, including how to leverage funding and ensure that career pathways are accessible to special populations

- CLASP. (2014). A Framework for Measuring Career Pathways Innovation. Retrieved from <a href="http://www.nationalresourcenetwork.org/en/Document/305891">http://www.nationalresourcenetwork.org/en/Document/305891</a>
  - Provides guidance on how to create alignment between local and state career pathways systems using continuous improvement metrics
- Advance CTE. (2016, forthcoming). The State of CTE: Increasing Access to Experts in the Classroom.
  - Forthcoming brief on how to use innovative hiring, certification, and workbased learning practices to increase students' access to industry experts in the classroom

## Questions

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## Feedback Survey

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